Shipowners fear regulation breach

> It is no secret that great confusion surrounds the future implementation of the yet to be ratified Ballast Water Management (BWM) Convention under which shipowners will have to meet rigorous rules on how they use technology to discharge ballast water. Shipping transfers about 3 to 5 billion tonnes of ballast water internationally each year, which poses significant environmental threats through the transfer of invasive marine species into new environments.

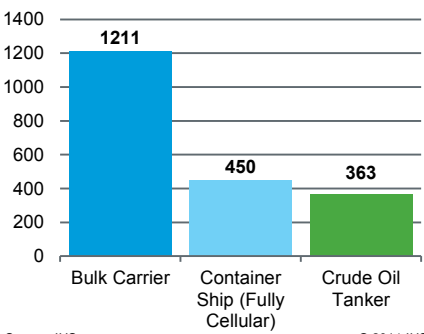
According to *IHS Maritime* data, the ship types which have the highest number of ballast water management systems in use are bulk carriers, container ships, and crude oil tankers (see graph).

One of the issues at stake for shipowners is lack of familiarity with D1 and D2 regulations: D1 specifies the volume of water to be replaced and D2 covers approved ballast water treatment systems, and specifies the levels of viable organisms that can be left in water after treatment.

Shipowners face the risk that their ballast water discharge solutions could breach the D2 regulations if the ship operator overflows a ballast tank via a ballast water treatment system. Another problem is failing to comply with the Vessel General Permit (VGP) regulations, which centre on conduct around US ports. The fear is that shipowners could be fined or become involved in an alleged pollution incident.

Ballast water consultant Michael Haraldsson from Haraldsson Consulting

Number of ballast water management systems



Source: IHS © 2014 IHS

cautioned: "When the International Maritime Organization introduced the D2 regulation, I think they only thought about overflow of a tank in terms of foreign species; they forgot that the character of the water changes between intake and overflow if you use an active solution. Everyone knows that you have re-growth with the UV solution. That is why you have to use UV during de-ballast as well. The problem is that you never make the ballast tank 100% empty and therefore, at your next ballasting, you will mix treated water with the water in the tanks."

The 2008 VGP requirements expired on 19 December 2013. Earlier in 2013, the US Environmental Protection Agency (EPA) issued updated VGP requirements that started from 19 December 2013 and are to apply for another five years.

Approvals

The VGP is a set of environmental regulations designed to reduce pollution by commercial vessels greater than 24m (79 feet) in length, excluding military and recreational vessels visiting US ports or operating in US waters. The VGP is enforced by the US Environmental Protection Agency (EPA), but monitored by the US Coast Guard (USCG) during normal Port State Control examinations. The new (2013) regulations state that each vessel must comply with the provisions of a VGP which will be issued by the EPA. The 2013 VGP does prohibit the discharge of untreated sediments from the cleaning of ballast tanks into US waters as well as requiring other measures to reduce sediment intake.

The USCG will establish an approval process for ballast water treatment systems. It will include land-based tests, following the EPA's Environmental Technology Verification (ETV) Protocol (2010), as well as shipboard tests. This approval process is not expected to be fully workable until 2015, and meanwhile an Alternative Management System (AMS) may be used, provided that it is installed on the ship before the required implementation date, and that the AMS has been approved by the USCG on a "case by case" basis.

The USCG 2013 VGP ballast water discharge standards are of concern within the maritime industry as breaching them can result in significant civil and criminal penalties for shipowners, warned Christian Ott, vice-president head of claims at Scandanavian P&I club Skuld, which has published guidelines for its members on how to meet them.

Ott said that Skuld had observed an increased focus on the potential environmental impact of vessel discharges over the past 10 years. A legal maze is now emerging as countries create their own rules and international regulations are drawn up to handle the fallout of ballast water discharge – meaning continuing vigilance of the legal landscape to ensure compliance with present and future requirements and stretched people and financial resources.

"Such investment will be needed to ensure ships physically comply with the rules, crews are properly trained as to how to comply in practice, and shore-based staff need to be able to monitor and follow up on vessel's operations," added Ott.

Describing the 2013 VGP rules as the "most ground-breaking regulatory change that has ever hit the marine industry", the Canadian Ship Owners Association (CSA) echoed similar concerns about its impact. According to CSA's president, Robert Lewis-Manning, under the regulations certain ships will be required to carry equipment designed to kill foreign organisms in the ballast water and prevent them from entering the Great Lakes ecosystem. He said newly constructed vessels, or vessels currently under construction will be required to have the solutions installed as early as 19 December 2013 with other classes of ships requiring the upgrades by 2014 or 2016. However, the crux of the problem is that it is claimed that the technology does not exist yet – an issue the CSA is looking at in ongoing discussions with the US authorities. However, many systems have received an AMS.

It appears that until the Canadian authorities have a ballast water regulation framework that is in harmony with the US VGP regulations there is a potential for the US VGP regulations to be unworkable for the Canadian shipping industry.

In the meantime, shipowners can seek guidance and assistance from the USCG and ship classification societies on the new 2013 US VGP ballast water regulations. ■